with half the cycle of existence of each of them; the other is still to be discovered.

I have given to the new insect the name of Ritsemia, in honour of M. C. Ritsema, the curator of the Museum at Leyden, who is well known in the entomological world. I have added the specific name pupifera, to recall to mind the mode of reproduction (anthogenesis), in which there intervenes a form furnishing male and female pupæ, from which the sexual individuals issue and copulate immediately. It is this form that I have called "Pseudogyne pupifère." This form exists among the Phylloveræ and all the Pemphigians. I find it here among the Coccidæ.—Comptes Rendus, April 28, 1879, p. 870.

On Gordius, and on some Parasites of the Rat.

Prof. Leidy exhibited a curious knotted mass of living hairworms (Gordius robustus?) which had been sent to him by Dr. S. T. Roman, of Conowingo, Cecil Co., Md. The mass had been picked up in a gutter at the edge of a forest near Conowingo, on the rainy morning of Dec. 15, 1878. It contained fifty-two male individuals, and seven females. The former ranged from 8 to 25 centims, in length, by ½ to ½ of a millim. in thickness; the latter range from 14 to 19½ centims. in length, by 1 millim. in thickness. The females are generally of much lighter colour and more robust character than the males. In both sexes the body is most attenuated anteriorly; but in the female the body is nearly as thick at the posterior extremity as it is at the middle. Some of the smaller males are pale brownish white; but most of them, from the smallest to the largest, are of various shades of brown to chocolate-brown. The females are pale brownish to darker brownish. In both sexes the head forms a convex whitish eminence, encircled by a narrow black ring, from which a band of brown extends dorsally and ventrally along the body. The posterior end of the body is likewise of darker colour than the part just in advance.

The tail of the male makes a spiral turn inwardly and is furcate. The forks are short, curved, slightly divergent, blunt conical processes. Just in advance of their conjunction internally there exists an inverted crescentic fold of browner colour than the contiguous parts; and immediately in advance is the genital pore. The interval

of the caudal forks is smooth, or free from papillæ.

The tail of the female appears truncated, is bluntly rounded, feebly clavate, or slightly thicker than just in advance, and nearly as thick as the middle of the body. It presents a terminal pore,

marked by a brown spot and encircled with a brown ring.

Under a moderate magnifying-power, the brown integument is minutely mottled with whitish spots, and it exhibits fine longitudinal and diagonal striation. In sunlight it is beautifully iridescent as in the earthworm.

The worms are still quite lively. When disentangled and left Ann. & Mag. N. Hist. Ser. 5. Vol. iii. 32

alone they soon become again knotted together in a compact rounded mass as at present, with the heads divergent, and writhing so as to

remind one of the head of the fabled Medusa.

Prof. Leidy then directed attention to several other specimens which had been sent to him for information. One of these is a bunch of tapeworms, fifteen individuals of *Twinia diminuta*, from the intestine of a rat. The other is the liver of a rat with a multitude of cysts, the size of large peas, containing *Cysticercus fasciolaris*. In a letter accompanying the specimens, Dr. John R. Hewett states that last spring he had examined about 500 rats (*Mus decumanus*), in Carroll Co., Mo., and only in half a dozen instances did he find the liver free from the parasite.—*Proc. Acad. Nat. Sci. Philad.* Jan. 28, 1879.

On some Plesiosaurians of the Upper Jurassic Strata of Boulogne-sur-Mer. By M. H. E. Sauvage.

Of the same age as the beds of Shotover and Kimmeridge, the Upper Jurassic deposits of Boulogne-sur-Mer have in part the same herpetological fauna. Thus, to cite only Plesiosaurians, the following were stranded upon the Jurassic shores of the Boulonnais:—Pliosaurus gamma, P. grandis, Polyptychodon Archiaci, Plesiosaurus carinatus, infraplanus, plicatus, and ellipsospondylus, belonging to the family Plesiosauridæ, and Polycotylus suprajurensis, Murænosaurus Manselii, and M. brachyspondylus, to that of the Elasmosauridæ. These Reptiles were not the only Plesiosaurians frequenting those shores; with them lived Colymbosaurus Dutertrei, Plesiosaurus morinicus, P. Phillipsi, and Pliosaurus suprajurensis.

This last species, found in the upper part of the Portlandian, is distinguished from *P. brachydeirus* by the greater length of the cervical and dorsal vertebræ. In the cervicals the lower surface of the centrum, which is strongly rounded, bears a broad and salient crest, the articular surfaces are nearly smooth; the neurapophysis is wide, the zygapophysis slightly passes the level of the centrum. The length being 100, the width will be 154, and the

height 130.

Under the name of *Plesiosaurus carinatus*, sp. n., Phillips has figured a small species from Buckinghamshire; this species not being the same as that described by Cuvier under the same name, we may call it *P. Phillipsi*. Among distinctive characters between the two species, the cervical vertebræ of *P. Phillipsi* are longer, the form of the articular surface of the pleurapophyses is different, and the relations between the surface for the attachment of the rib and the extremity of the suture which unites the neurapophysis to the centrum are quite different.

Although allied to *Plesiosaurus carinatus*, Cuv., *P. morinicus* is distinguished therefrom, as regards vertebræ occupying the same place in the cervical series, by the form of the articular surfaces and the greater breadth of the inferior surface of the centrum, and because